

II. Remarks

Claims 1-13 and 15-19 are currently pending. Reconsideration and further examination of this application in view of the following remarks is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

The Examiner rejected claims 1-2 and 5-7 under 35 U.S.C. § 103(a) as being unpatentable over *Stevenson et al.* (U.S. Pat. No. 5,746,961, “*Stevenson*”), in view of *Asato et al.* (U.S. Pat. No. 5,030,681, “*Asato*”).

Claim 1 recites a method of manufacturing a high surface energy molded article, including applying a chlorinated polyolefin to the inner surface of the injection mold, introducing a thermoplastic resin, maintaining contact of the thermoplastic resin and chlorinated polyolefin for a predetermined time, and increasing the surface energy of the portion of the molded article for enhanced adhesion.

As acknowledged by the Examiner, *Stevenson et al.* fails to disclose using a chlorinated polyolefin coating as recited in claim 1. Additionally, *Stevenson* does not disclose any coatings that are capable of increasing the surface energy of a coated portion of a molded article, as recited in claim 1. Rather, *Stevenson* teaches away from the coating recited in claim 1 and discloses enhancement solids that impart solvent resistance to the coated article, impart hardness to the coated article, and impart surface toughness to the coated article. (*Stevenson* at col. 3, line 64 through col. 4, line 32.)

Asato fails to cure the deficiencies of *Stevenson*. First of all, *Stevenson* and *Asato* are not properly combinable with each other because they are nonanalogous references and they are not concerned with the same problem. “In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” (MPEP § 2141.01(a)). *Stevenson* discloses a mold for forming foamed plastic parts whereas *Asato* discloses a paint containing a modified chlorinated resin. *Stevenson* fails to disclose a chlorinated resin, or any other similar compounds discussed in *Asato*, and *Asato* fails to disclose

any molding or coating techniques or methods such as those discussed in *Stevenson*. In fact, *Asato* fails to disclose any uses or applications for the paint discussed therein.

Furthermore, the two references are not reasonably pertinent to the same problem because the mold for forming plastic foam parts in *Stevenson* is designed to provide a surface enhancement solids to an article, such as imparting solvent resistance to the coated article, imparting hardness to the coated article, and imparting surface toughness to the coated article; conversely, *Asato* is designed to provide a coating material that increased gasoline resistance, smell control, and storage stability. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use *Asato*'s coating during *Stevenson*'s molding process in order to impart the desired adhesion and stability of the final molded article. However, *Stevenson* fails to disclose or suggest any advantages of coating an object with chlorinated polyolefins or any other coatings that improve the object's surface energy and *Asato* fails to disclose any advantages of molding an article or any other means for forming, treating, or coating an article. Therefore, the deficiencies of *Stevenson* are not cured by combination with *Asato* and the Examiner's rejection of claim 1 should be withdrawn.

Claims 2 and 5-7 depend from claim 1. Therefore, for the reasons discussed above, the Examiner's rejections of claims 1-2 and 5-7 should be withdrawn.

The Examiner rejected claims 3-4, 8-13, and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Stevenson* in view of *Asato* and *Pettit, Jr.* et al. (U.S. Pat. No. 4,937,288, "*Pettit*").

Claims 3-4 depend from claim 1. For the reasons discussed above, *Stevenson* fails to disclose or render obvious the elements of claim 1. Additionally, *Pettit* fails to cure the deficiencies of *Stevenson*, as *Pettit* fails to disclose, teach, or suggest using a chlorinated polyolefin coating as recited in claim 1, or any other coatings that are capable of increasing the surface energy of a coated portion of a molded article, as recited in claim 1. Therefore, for the reasons discussed above, the Examiner's rejections of claims 3-4 should be withdrawn.

Claim 8 recites a method of manufacturing a molded article including, applying an electrical charge to a plurality of particles of the substance, electrically grounding at least a portion of the mold, applying the substance to the inner surface of the mold, and maintaining contact of the thermoplastic resin and the substance for a predetermined time period to diffuse the substance through at least a portion of the surface of the molded article.

As acknowledged by the Examiner, *Stevenson* et al. fails to disclose electrically charging particles as recited in claim 8.

Pettit fails to cure the deficiencies of *Stevenson*. First of all, *Stevenson* and *Pettit* are not properly combinable with each other because they are nonanalogous references and they are not concerned with the same problem. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." (MPEP § 2141.01(a)). *Stevenson* discloses a mold for forming foamed plastic parts whereas *Pettit* discloses a powder containing. *Stevenson* fails to disclose applying an electrical charge to particles and *Pettit* fails to disclose any molding or coating techniques or methods such as those discussed in *Stevenson*.

Furthermore, the two references are not reasonably pertinent to the same problem because the mold for forming plastic foam parts in *Stevenson* is designed to provide a surface enhancement solids to an article, such as imparting solvent resistance to the coated article, imparting hardness to the coated article, and imparting surface toughness to the coated article; conversely, *Pettit* is designed to provide a coating material with a good exterior durability. (*Pettit* at col. 1, lines 15-25.) The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use *Pettit*'s electrical charging steps during *Stevenson*'s spraying because electrostatic spraying is known as a feasible method of applying a coating to a substrate. However, *Stevenson* fails to disclose or suggest any advantages of coating an object with an electrical charge step and *Asato* fails to disclose any advantages of coating a mold. Therefore, the deficiencies of *Stevenson*

are not cured by combination with *Pettit* and the Examiner's rejection of claim 8 should be withdrawn.

Additionally, even if *Stevenson* and *Pettit* are properly combinable, they fail to render obvious the invention recited in claim 8. *Pettit* fails to disclose, teach, or suggest applying a powder coating to a mold for creating article, as recited in claim 8. Rather, *Pettit* teaches applying a powder coating directly on the finished article, after the article has been formed. (*Pettit* at col. 15, lines 24-40.) Therefore, for this independent reason, the deficiencies of *Stevenson* are not cured by combination with *Pettit* and the Examiner's rejection of claim 8 should be withdrawn.

Claims 9-13 and 15 depend from claim 8. Therefore, for the reasons discussed above, the Examiner's rejections of claims 8-13 and 15 should be withdrawn.

The Examiner rejected claims 16-17 under 35 U.S.C. § 103(a) as being unpatentable over *Stevenson* in view of *Pettit*.

Claim 16 recites a method of manufacturing a molded article including, applying an electrical charge to a plurality of particles of a substance, electrically grounding at least a portion of the mold, spraying the plurality of particles of the substance onto the inner surface of the mold, and inserting a thermoplastic resin having a temperature of at least 190 degrees Celsius into the mold such that the substance is bonded to an outer surface of the thermoplastic resin.

As discussed above with respect to claim 8, *Stevenson* et al. fails to disclose electrically charging particles as recited in claim 16 and *Pettit* fails to cure the deficiencies of *Stevenson*. First of all, *Stevenson* and *Pettit* are not properly combinable with each other because they are nonanalogous references and they are not concerned with the same problem. Additionally, the two references are not reasonably pertinent to the same problem because the mold for forming plastic foam parts in *Stevenson* is designed to provide a surface enhancement solids to an article, such as imparting solvent resistance to the coated article, imparting hardness to the coated article, and imparting surface toughness to the coated article; conversely, *Pettit* is designed to provide a coating material with a good exterior durability. (*Pettit* at col. 1, lines 15-25.)

Furthermore, even if *Stevenson* and *Pettit* are properly combinable, they fail to render obvious the invention recited in claim 16. *Pettit* fails to disclose, teach, or suggest applying a plurality of particles of the substance onto the inner surface of the mold for creating article, as recited in claim 16. Rather, *Pettit* teaches applying a powder coating directly on the finished article, after the article has been formed. (*Pettit* at col. 15, lines 24-40.) Therefore, for this independent reason, the deficiencies of *Stevenson* are not cured by combination with *Pettit* and the Examiner's rejection of claim 16 should be withdrawn.

Claim 17 depend from claim 16. Therefore, for the reasons discussed above, the Examiner's rejections of claims 16-17 should be withdrawn.

The Examiner rejected claims 18-19 under 35 U.S.C. § 103(a) as being unpatentable over *Stevenson* and *Pettit*, further in view of *Asato*.

Claims 18-19 depend from claim 16. For the reasons discussed above, *Stevenson* in view of *Pettit* fails to disclose or render obvious the elements of claim 16. Additionally, *Asato* fails to cure the deficiencies of *Stevenson* in view of *Pettit*, as *Asato* fails to disclose, teach, or suggest applying a plurality of particles of the substance onto the inner surface of the mold for creating article, as recited in claim 16. Therefore, for the reasons discussed above, the Examiner's rejections of claims 18-19 should be withdrawn.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. The Examiner is invited to contact the undersigned attorney for the Applicant via telephone number (312) 245-5390, if such communication would expedite this application.

Respectfully submitted,

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/Jon H. Beaupré/
Jon H. Beaupré (Reg. No. 54,729)